

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-4 (cancelled).

5. (currently amended) A viewfinder display of a camera displaying given information superimposed with an object image, the viewfinder display ~~using a holographic optical element, the holographic optical element~~ comprising:

a first a pair of spaced apart board shaped transparent members facing each other member which has a board shape and on which object light is incident;

a second transparent member which has a board shape and is separately disposed from the first transparent member facing the first transparent member, and from which the object light incident on the first transparent member leaves;

transparent electrodes formed on the respective transparent members the first transparent member and the second transparent member, respectively, and facing each other;

a first liquid crystal whose orientation is  
changeable ~~an orientation changeable liquid crystal~~; and  
a second liquid crystal whose orientation is fixed  
~~an orientation fixed liquid crystal~~;

the first ~~orientation changeable~~ liquid crystal and  
the second ~~orientation fixed~~ liquid crystal being  
arranged alternately in a first direction with a striped  
shape between the transparent members on which the  
transparent electrodes are formed facing each other,

wherein the viewfinder display has an incident  
surface on which light crossing a direction of an optical  
path of the object light is incident, and the incident  
surface crosses an exit surface from which the object  
light leaves the second transparent member, and crosses  
the first direction, and

wherein the light incident on the incident surface  
is diffracted by the first liquid crystal and the second  
liquid crystal and leaves from the exit surface.

6. (original) The viewfinder display of a camera  
according to claim 5, wherein the transparent electrodes are  
arranged on the transparent members such that the  
transparent electrodes form a figure shape and a letter  
shape, and the figure and the letter are displayed as the  
given information.

7. (original) The viewfinder display of a camera according to claim 5, wherein the transparent electrodes are arranged on the transparent members such that the given information is displayed as a dot-matrix.

8. (currently amended) A viewfinder display of a camera displaying given information superimposed with an object image, the viewfinder display using a combination of a plurality of holographic optical elements, each holographic optical element comprising:

a first ~~a pair of spaced apart board shaped~~  
transparent ~~members facing each other~~ member which has a  
board shape and on which object light is incident;

a second transparent member which has a board shape  
and is separately disposed from the first transparent  
member facing the first transparent member, and from  
which the object light incident on the first transparent  
member leaves;

transparent electrodes formed on ~~the respective~~  
~~transparent members~~ the first transparent member and the  
second transparent member, respectively, and facing each  
other;

a first liquid crystal whose orientation is  
changeable ~~an orientation changeable liquid crystal;~~ and  
a second liquid crystal whose orientation is fixed

~~an orientation fixed liquid crystal;~~

the first ~~orientation changeable~~ liquid crystal and the second ~~orientation fixed~~ liquid crystal being arranged alternately in a first direction with a striped shape between the transparent members on which the transparent electrodes are formed facing each other,

wherein each holographic optical element has an incident surface on which light crossing a direction of an optical path of the object light is incident, and the incident surface crosses an exit surface from which the object light leaves the second transparent member, and crosses the first direction, and

wherein the light incident on the incident surface is diffracted by the first liquid crystal and the second liquid crystal and leaves from the exit surface.

9. (currently amended) A camera ~~arranging in which~~ the viewfinder display of a camera according to claim 5 ~~in the vicinity of~~ has a screen on which an object image is formed.

10. (currently amended) A camera ~~arranging in which~~ the viewfinder display of a camera according to claim 8 ~~in the vicinity of~~ has a screen on which an object image is formed.

11. (currently amended) The viewfinder display of a camera according to claim 5, further comprising a light source that ~~is arranged near a side of the holographic optical element and illuminates the holographic optical element from the side~~ emits light incident on the incident surface.

12. (currently amended) The viewfinder display of a camera according to claim 11, wherein the light source ~~illuminates the holographic optical element entirely~~ emits light incident on the incident surface irrespective of whether voltage is applied to the transparent electrodes.

13. (new) The viewfinder display of a camera according to claim 5, wherein the second liquid crystal is an ultraviolet-setting liquid crystal.

14. (new) The viewfinder display of a camera according to claim 5, wherein with no-voltage applied between the transparent electrodes, orientation of the first liquid crystal is the same as that of the second liquid crystal, and with voltage applied between the transparent electrodes, orientation of the first liquid

crystal is different from that of the second liquid crystal, so that light incident on the incident surface is diffracted.

15. (new) The viewfinder display of a camera according to claim 5, wherein with no-voltage applied between the transparent electrodes, orientation of the first liquid crystal is different from that of the second liquid crystal, and with voltage applied between the transparent electrodes, orientation of the first liquid crystal is the same as that of the second liquid crystal, so that with no-voltage applied, light incident on the incident surface is diffracted.

16. (new) The viewfinder display of a camera according to claim 8, wherein the plurality of holographic optical elements are combined as layers.

17. (new) The viewfinder display of a camera according to claim 8, wherein the plurality of holographic optical elements are operated in turn with time-sharing.

18. (new) A camera comprising:

the viewfinder display of a camera according to claim 5 having a focusing screen on which an image is formed by a photographic lens;

wherein the viewfinder display is disposed along an optical axis of the photographic lens.

19. (new) The camera according to claim 18, further comprising:

a light source for emitting light incident on the incident surface.

20. (new) A method for displaying in a viewfinder of a camera comprising steps of:

providing a first transparent member which has a board shape and on which object light is incident;

providing a second transparent member which has a board shape and is separately disposed from the first transparent member facing the first transparent member;

providing transparent electrodes formed on the first transparent member and the second transparent member, respectively, and facing each other;

disposing a first liquid crystal whose orientation is changeable and a second liquid crystal whose

orientation is fixed between the transparent electrodes which are facing each other such that the first liquid crystal and the second liquid crystal are arranged alternately in a first direction with a striped shape;

disposing an incident surface on which light crossing a direction of an optical path of the object light is incident, the incident surface crossing an exit surface from which the object light leaves the second transparent member, and crossing the first direction; and

emitting the light from the exit surface, which is incident on the incident surface, and diffracted by the first liquid crystal and the second liquid crystal.

21. (new) The method for displaying in a viewfinder of a camera according to claim 20, further comprising a step of:

arranging the transparent electrodes on the transparent members such that the transparent electrodes form a figure shape and a letter shape, and the figure and the letter are displayed as given information.

22. (new) The method for displaying in a viewfinder of a camera according to claim 20, further comprising a step of:



arranging the transparent electrodes such that given information is displayed as a dot-matrix.

23. (new) A method for displaying in a viewfinder of a camera comprising steps of:

providing a plurality of holographic elements, each formed by:

providing a first transparent member which has a board shape and on which object light is incident;

providing a second transparent member which has a board shape and is separately disposed from the first transparent member facing the first transparent member;

providing transparent electrodes formed on the first transparent member and the second transparent member, respectively, and facing each other;

disposing a first liquid crystal whose orientation is changeable and a second liquid crystal whose orientation is fixed between the transparent electrodes which are facing each other such that the first liquid crystal and the second liquid crystal are arranged alternately in a first direction with a striped shape;

disposing an incident surface on which light crossing a direction of an optical path of the object light is incident, the incident surface crossing an exit

surface from which the object light leaves the second transparent member, and crossing the first direction; and emitting the light from the exit surface, which is incident on the incident surface, and diffracted by the first liquid crystal and the second liquid crystal.

24. (new) The method for displaying in a viewfinder of a camera according to claim 20, further comprising a step of:

providing a light source that emits light incident on the incident surface.

25. (new) The method for displaying in a viewfinder of a camera according to claim 24, further comprising a step of:

emitting from the light source light incident on the incident surface irrespective of whether voltage is applied to the transparent electrodes.

26. (new) The method for displaying in a viewfinder of a camera according to claim 20, further comprising a step of:

diffracting light incident on the incident surface by applying voltage between the transparent electrodes,

orientation of the first liquid crystal being the same as that of the second liquid crystal when no-voltage is applied, so that with voltage applied between the transparent electrodes, orientation of the first liquid crystal is different from that of the second liquid crystal.

27. (new) The method for displaying in a viewfinder of a camera according to claim 20, further comprising a step of:

diffraction light incident on the incident surface when no-voltage is applied between the transparent electrodes, orientation of the first liquid crystal being different from that of the second liquid crystal when no-voltage is applied, and orientation of the first liquid crystal being the same as that of the second liquid crystal when voltage is applied.

28. (new) The method for displaying in a viewfinder of a camera according to claim 23, further comprising a step of:

combining the plurality of holographic optical elements as layers.

29. (new) The method for displaying in a viewfinder of a camera according to claim 23, further comprising a step of:

operating the plurality of holographic optical elements in turn with time-sharing.